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NOTES ON THE TAXONOMY OF THREE GENERA
OF TROMBICULID MITES (CHIGGER MITES),
TOGETHER WITH THE DESCRIPTION OF A
NEW GENUS

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In this paper some notes are recorded on the taxonomy of the genera *Trombiculoides* Jacot, *Paraschöngastia* Womersley, and *Neoschöngastia* Ewing of the family Trombiculidae. Also a new genus is described to include a part of *Neoschöngastia* Ewing as originally proposed.

Status of *Trombiculoides* Jacot

Jacot (1938) established the genus *Trombiculoides* on what he regarded as Say's *Trombidium scabrum*. However, he identified as representing *scabrum* a species taken "from under the bark of a large prone oak," near Savannah, Georgia, which clearly is a trombiculid mite. That this identification was correctly made there is reason to doubt, since following Say's original description (Say, 1821) Say stated that his *scabrum* was found: "In forests, on trees, etc.; not uncommon." He made no mention of its occurrence in Georgia or East Florida. This is very significant since this description of *Trombidium scabrum* was given in a paper that had the title, "An account of the Arachnides of the United States." Several species mentioned in this paper evidently were not taken along the Southeastern coast,—for example *Oribata concentrica* Say. Say's statement in regard to this species is merely that it: "Inhabits Pennsylvania."

Three statements in Say's original paper are of special significance, one in his generic description of *Trombidium* that the eyes are pedunculated, and two in the specific description of *scabrum*,—that the hairs are "hardly perceptible" and the eyes are "white". These statements, I believe, definitely eliminate all the trombiculid mites from consideration in connection with his *scabrum*. In the trombiculid mites the eyes are either absent, or there is a poorly developed pair easily overlooked, unless the specimen is cleared and mounted, and the hairs or setae are long and conspicuous.

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The present writer believes that Say's description of *scabrum* does fit the species to which the name has been applied by various workers and especially by Howard (1918). Howard reared the larvae and gave a plate of drawings of the species that he regarded as Say's *scabrum*, putting it in the genus *Sericothrombium* Berlese. If Jacot's identification of *scabrum* is incorrect, *Trombiculoides*, according to the rules of nomenclature, probably should be considered a synonym of *Sericothrombium* Berlese.

Paraschöngastia Womersley 1939 = *Neoschöngastia* Ewing 1929

The genus *Paraschöngastia* Womersley 1939 was erected for four New Guinea species described by Gunther in *Neoschöngastia*. Although zoologically this genus is based on good generic characters, unfortunately its type, *Neoschöngastia yeomansi* Gunther, is very closely related to the type of *Neoschöngastia*, *Schöngastia americana* Hirst. In fact *Neoschöngastia americana* (Hirst) is a typical *Paraschöngastia*, as can be seen from a drawing (Fig. 1) here given of the dorsal plate.

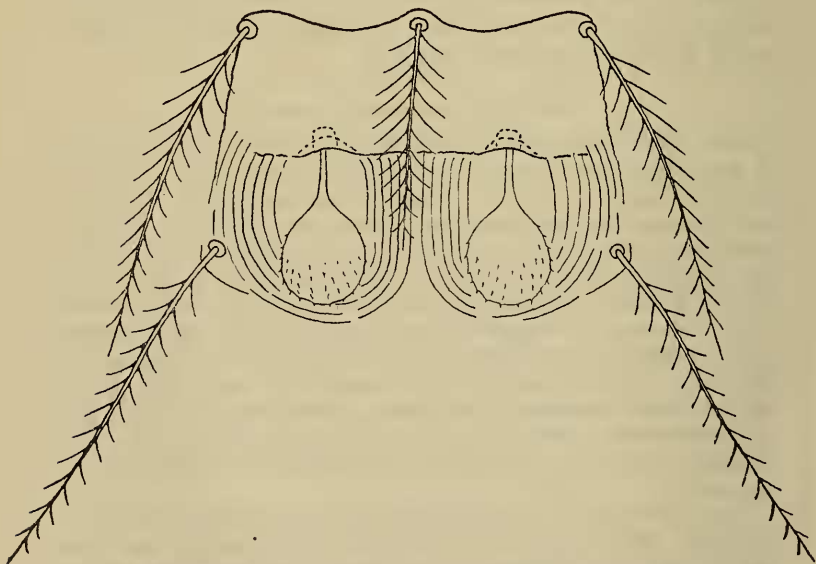


Fig. 1. Dorsal plate of *Neoschöngastia americana* (Hirst), the type species of *Neoschöngastia*.

If this synonymy is accepted, the name *Neoschöngastia* should be restricted to the species that have been placed in *Paraschöngastia*, and the species formerly going in *Neoschöngastia* should be given a new name.

For them the name *Ascoshöngastia* is proposed. It is described as follows:

Ascoshöngastia, new genus

Chelicera stout, bladelike, with a single tooth above and usually one below, and extending beyond apex of basal segment. Palpus rather stout; femur angulate laterally or rounded; palpal claw bifurcate or trifurcate. Tracheae and spiracles absent. Dorsal plate without a raised crest in front of pseudostigmata and posterior half without circular striations. Abdomen without posterodorsal plates; dorsal setae sometimes numerous, humerals not situated in row II. Legs of medium length; coxae III with one or more barbed or branched setae; tarsi three-clawed, middle claw being more slender than the other two.

Type species: Neoshöngastia malayensis Gater 1932.

References Cited

- EWING, H. E., 1929. A manual of external parasites, 225 pp., 96 figs. Charles C. Thomas, Publisher, Springfield, Illinois.
- GATER, B. A. R., 1932. Malayan trombidid larvae, Part I. Parasitology 24; 143-174, illus.
- HOWARD, C. W., 1918. A preliminary report on the Trombidiidae of Minnesota. Seventeenth Rep. State Entom. Minnesota 17: 111-144, illus.
- JACOT, A. P., 1938. Thomas Say's free-living mites rediscovered. Psyche 45: 121-132, illus.
- SAY, T., 1821. An account of the Arachnides of the United States. Jour. Acad. Nat. Sci. Philadelphia 2: 59-83.
- WOMERSLEY, H., 1939. Further notes on the Australian Trombidiidae with description of new species. Trans. Roy. Soc. So. Australia 63: 149-166, illus.